CLAIMS LISTING

1. (Original) A composition comprising the formula W-Z-X, wherein W comprises a first DNA binding domain, X comprises a second DNA binding domain and Z comprises a hinge domain, and wherein the composition binds a DNA binding site.

2. (Original) The composition of claim 1, wherein the composition binds a hormone response element selected from the group of response elements consisting of Estrogen Response Element (ERE), Glucocorticoid Response Element (GRE), Androgen Response Element (ARE), Progesterone Response Element (PRE), Thyroid Response Element (TRE), Retinoid X Response Element (RXRE), all-trans Retinoic Acid Response Elements (RARE), and Vitamin D Response Element (VDRE).

3. (Original) The composition of claim 1, further comprising Y, an activation domain or a repressor domain.

4. (Currently amended) The ~~hinge domain~~ composition of claim 1, wherein the hinge domain comprises an ER D-domain.

5. (Currently amended) The ~~hinge domain~~ composition of claim 4, wherein the ER D-domain comprises the ER D-domain from ERα or ERβ.

6. Canceled.

7. (Original) The composition of claim 1, wherein the first DNA binding domain comprises a DNA binding domain of a transcription factor.

8. (Original) The composition of claim 7, wherein the transcription factor can be selected from the group of transcription factors consisting of Estrogen receptor (ER), Glucocorticoid receptor (GR), Androgen receptor (AR), Progesterone receptor (PR), Thyroid receptor (TR), Retinoid X receptor (RXR), all-trans Retinoic Acid receptor (RAR), and Vitamin D receptor (VDR)

9. (Previously presented) The composition of claim 7, wherein the transcription factor ER comprises ERα or ERβ.

10. Canceled.

11. (Original) The composition of claim 1, wherein the second DNA binding domain comprises a DNA binding domain of a transcription factor.

12. (Original) The composition of claim 11, wherein the transcription factor can be selected from the group of transcription factors consisting of Estrogen receptor (ER), Glucocorticoid receptor (GR), Androgen receptor (AR), Progesterone receptor (PR), Thyroid receptor (TR), Retinoid X receptor (RXR), all-trans Retinoic Acid receptor (RAR), and Vitamin D receptor (VDR).

13. (Previously presented) The composition of claim 11, wherein the transcription factor ER comprises ERα or ERβ.

14. Canceled.

15. (Original) The composition of claim 1, wherein the DNA binding site comprises a first half-site and a second half-site.

16. (Original) The composition of claim 15, wherein the first half-site comprises the sequence of SEQ ID NO: 1.

17. (Original) The composition of claim 15, wherein the first half-site comprises the sequence of SEQ ID NO: 2.

18. (Original) The composition of claim 15, wherein the second half-site comprises the sequence of SEQ ID NO: 1.

19. (Original) The composition of claim 15, wherein the second half-site comprises the sequence of SEQ ID NO: 2.

20. (Original) The composition of claim 15, wherein the first half-site and the second half-site are direct repeats.

21. (Original) The composition of claim 15, wherein the first half-site and the second half-site are inverted repeats.

22. (Original) The composition of claim 15, wherein the first half-site and the second half site are not separated by a nucleotide.

23. (Original) The composition of claim 15, wherein the first half-site and the second half site are separated by a 1, 2, 3, 4, 5, 10, or 15 nucleotide spacers.

24-29.Canceled.

30. (Previously presented) The composition of claim 1, wherein the binding site comprises the sequence as set forth in SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, SEQ ID NO: 13, SEQ ID NO: 14, SEQ ID NO: 15, SEQ ID NO: 16, SEQ ID NO: 17, SEQ ID NO: 18, SEQ ID NO: 19, SEQ ID NO: 20, SEQ ID NO: 21, or SEQ ID NO: 22.

31-49. Canceled.

50. (Original) The composition of claim 1, wherein the composition comprises an activation domain.

51. (Previously presented) The composition of claim 50, wherein the activation domain comprises one, two, three, or four VP16 domain(s).

52-54. Canceled.

55. (Previously presented) The composition of claim 50, wherein the activation domain comprises one, two, or four p65.

56-57. Canceled.

58. (Original) The composition of claim 50, wherein the activation domain comprises a VP16 and a p65.

59. (Original) The composition of claim 50, wherein the activation domain comprises two VP16 and two p65.

60. (Original) The composition of claim 1, wherein the composition comprises a repressor domain.

61. (Previously presented) The composition of claim 60, wherein the repressor domain comprises one, two, or four Krüpple associated box(es) (KRAB).

62-63. Canceled.

64. (Previously presented) The composition of claim 60, wherein the repressor domain comprises one, two, or four Sin3 interaction domain(s) (SID).

65-66. Canceled.

67. (Original) The composition of claim 60, wherein the repressor domain comprises a KRAB and a SID.

68. (Original) The composition of claim 60, wherein the repressor domain comprises two KRAB and two SID.

69. (Original) A nucleic acid encoding the composition of claim 1.

70. (Original) A vector comprising the nucleic acid of claim 69.

71. (Original) A cell comprising the vector of claim 70.

72. (Original) An animal comprising the cell of claim 71.

73. (Original) A cell comprising the nucleic acid of claim 69.

74. (Original) An animal comprising the cell of claim 73.

75. (Original) A method of identifying a gene that is under transcriptional control of a hormone response element comprising contacting a cell containing the hormone response element with the composition of claim 1 and monitoring the cell for changes in the transcription.

76. (Original) A method of identifying a gene that is under transcriptional control of a hormone response element comprising contacting a cell containing the hormone response element with the composition of claim 51 and monitoring the cell for changes in the transcription.

77. (Original) A method of identifying a gene that is under transcriptional control of a hormone response element comprising contacting a cell containing the hormone response element with the composition of claim 60 and monitoring the cell for changes in the transcription.

78. (Original) A method of treating cancer in a subject comprising administering to the subject the composition of claim 1.

79. (Original) A method of treating cancer in a subject comprising administering to the subject the composition of claim 60.

80. (Original) A method of inhibiting the transcription of a gene comprising contacting a cell containing the gene with the composition of claim 60.

81. (Original) The method of claim 80, wherein the cell is in a subject.

82. (Original) The method of claim 81, wherein the subject has cancer.

83. (Original) A method of overexpressing a gene in a cell comprising contacting the gene with the composition of claim 51.

84. (Original) A method of treating cancer in a subject comprising administering to the subject the composition of claim 1 wherein the composition causes the destruction of cancerous cells through the overexpression of genes under the control of hormone response elements.

85. (Original) A method of treating cancer in a subject comprising administering to the subject the composition of claim 51 so as to cause the destruction of cancerous cells through the overexpression of genes under the control of hormone response elements.

86. (Original) The composition of claim 1, wherein the first DNA binding domain comprises a sequence having at least 80% identity to the sequence set forth in SEQ ID NOs; 23, 25, 27, 29, 31, 33, 35, 37, or 39.

87. Canceled.

88. (Original) The composition of claim 1, wherein the second DNA binding domain comprises a sequence having at least 80% identity to the sequence set forth in SEQ ID NOs; 23, 25, 27, 29, 31, 33, 35, 37, or 39.

89-91. Canceled.

92. (Original) The composition of claim 1, wherein the hinge domain comprises a sequence having at least 80% identity to the sequence set forth in SEQ ID NOs; 24, 26, 28, 30, 32, 34, 36, 38, or 40.

93. Canceled.

94. (Original) The composition of claim 90, wherein the hinge domain comprises a sequence having at least 80% identity to the sequence set forth in SEQ ID NOs; 24, 26, 28, 30, 32, 34, 36, 38, or 40.

95. Canceled.